Dora Creek Curve Realignment

Initial Study/Negative Declaration

Mendocino County on U.S. Route 101 between the towns of Piercy and Leggett.

Caltrans District 1-Mendocino County-101
KP 155.3/156.1
(PM 96.5/97.0)
01-410500

May 2003

General Information About This Document

What's in this document?

This document is an Initial Study, which examines the potential environmental impacts of alternatives for the proposed project located in Mendocino County, California. The document describes why the project is being proposed, alternative methods for constructing the project, the existing environment that could be affected by the project, and potential impacts from each of the alternatives.

What should you do?

- Please read this Initial Study.
- We welcome your comments. If you have any concerns regarding the proposed project, send your written comments to Caltrans by the deadline of **June 5, 2003**
- Submit comments via regular mail to Caltrans,
  Attn: Mike Bartlett,
  Office of Environmental Management, S-3,
  2389 Gateway Oaks Dr, Suite 100
  Sacramento CA 95833;
- Submit comments via email to Mike_Bartlett@dot.ca.gov

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project were given environmental approval and funding were appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Mike Bartlett, Office of Environmental Management, 2389 Gateway Oaks Dr., Ste 100, Sacramento, CA 95833; (916) 274-0566 Voice, or use the California Relay Service TTY number, (530) 741-4509.

State of California
Department of Transportation

SCH Number: [TBD]
District 1- MEN -101-KP 155.3/156.1
(PM 96.5/97.0)

Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes a 101-meter radius curve realignment, with a concrete crib wall, at KP155.3/156.1 (PM 96.5/97.0) on Route 101 in Mendocino County. The project is located near the Smithe Redwood State Reserve, east of the south fork of the Eel River. Because of safety concerns, a Safety Project was initiated in May, 1999 to improve the geometrics by replacing a compound curve with a single radius curve.

Determination

Caltrans has prepared an Initial Study and determines from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The project will not adversely affect FEMA designated floodplains, water quality, recreational areas, scenic resources, hazardous materials, sensitive plant/animal species or mineral resources. No change will occur in local and regional air quality, traffic, population, or planned land use. Seismic and soil related hazards will not increase, nor will the ambient noise in the region permanently increase. There are no designated historic properties or other cultural resources within the project limits.

The project may have short-term minimal effects upon sensitive biological communities: however, project impacts to these resources will be minimized to a level of insignificance.

_____ _____

John D. Webb, Chief
North Region Environmental Services
California Department of Transportation

Date

01-MEN-101-[KP155.3/ 156.1]
([PM 96.5/ 97.0])
EA 01-410500

DORA CREEK CURVE REALIGNMENT

INITIAL STUDY

U.S. Route 101 in Mendocino County KP 155.3/156.1 (PM 96.5/97.0)

Submitted Pursuant to: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

ORIGINAL SIGNED BY:

Date of Approval

John D. Webb, Chief
North Region Environmental Services
California Department of Transportation

Summary

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) propose a 101-meter radius curve realignment, with a concrete crib wall, at KP 155.3/156.1 (PM 96.5/97.0) on Route 101 in Mendocino County. The project is located near the Smithe Redwood State Reserve, east of the south fork of the Eel River. Because of safety concerns, a Safety Project was initiated in May 1999, to improve the roadway geometrics by replacing a compound curve with a single radius curve.

Many alternatives were considered in the development of this project. Criteria for the selection of an alternative included cost, environmental impacts, meeting Highway Design standards and meeting the objective of improving the safety of this compound curve. Other alternatives that were considered ranged from the minimal, improving the superelevation, to the ultimate project, which would have met design standards by increasing the radius of the curve to 150meters (m). Project alternatives that would result in adverse impact to the Smithe Redwoods State Reserve were rejected and the proposed project was developed in conjunction with State Parks staff.

There are no significant impacts associated with this project. Some construction impacts in the area of air quality, aesthetics, noise and water quality will occur and are unavoidable, however, these impacts are temporary in nature and measures will be taken to minimize them. Construction related impacts will be less than significant prior to the incorporation of any mitigation measures.

Permits from Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Game will not be required for this project. Concurrence for this project has been obtained from the following agencies: Office of Historic Preservation, State Parks, National Marine Fisheries Service, United States Fish and Wildlife Service and National Park Service.

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List of Abbreviated Terms

AC	Asphalt Concrete
ACOE	Army Corps of Engineers
APE	Area of Potential Effects
Caltrans	California Department of Transportation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CNDDB	California Dept of Fish and Game Natural Diversity Database
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
ft	foot/feet
HDM	Highway Design Manual
km	kilometer(s)
KP	kilometer post
m	meter(s)
MBGR	Metal Beam Guard Rail
mi	mile(s)
NEPA	National Environmental Policy Act
NES	Natural Environmental Study
NMFS	National Marine Fisheries Service
NRHP	National Register of Historic Places
PM	post mile
PRC	California Public Resources Code
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Officer
SWPPP	Storm Water Pollution Prevention Plan
TCE	Temporary Construction Easement
TOS	Thresholds of Significance
USFWS	United States Fish and Wildlife Service
VIA	Visual Impact Analysis
WPCP	Water Pollution Control Program

Chapter 1 Proposed Project

1.1 Project Description

The proposed project will improve traffic safety by improving the roadway geometrics of a compound curve on Route 101 in Mendocino County from KP 155.3 to 156.1 (PM 96.5to 97.0). This will be accomplished by a roadway realignment that removes a compound curve and replaces it with a single curve. A concrete crib wall approximately 70-meters long and between 3.5 and 7-meters high will be installed on the outside of the curve. Metal Beam Guard Rail will be installed at a length of approximately 165-meters. See Appendix B for a detailed map of design plans.

Some additional work that will be required to meet the objective of the curve correction will include:

- Removal of some Asphalt Concrete (AC) on the southbound lane and shoulder and spot locations on the northbound shoulder, adding base to the existing structural section, and paving with a dense graded AC.

- An overlay of open graded AC friction course will be added to improve traction and facilitate drainage during wet weather.

- Shoulder widening will include a sawcut and "gut-out" 0.3m from the edge of pavement on both sides.

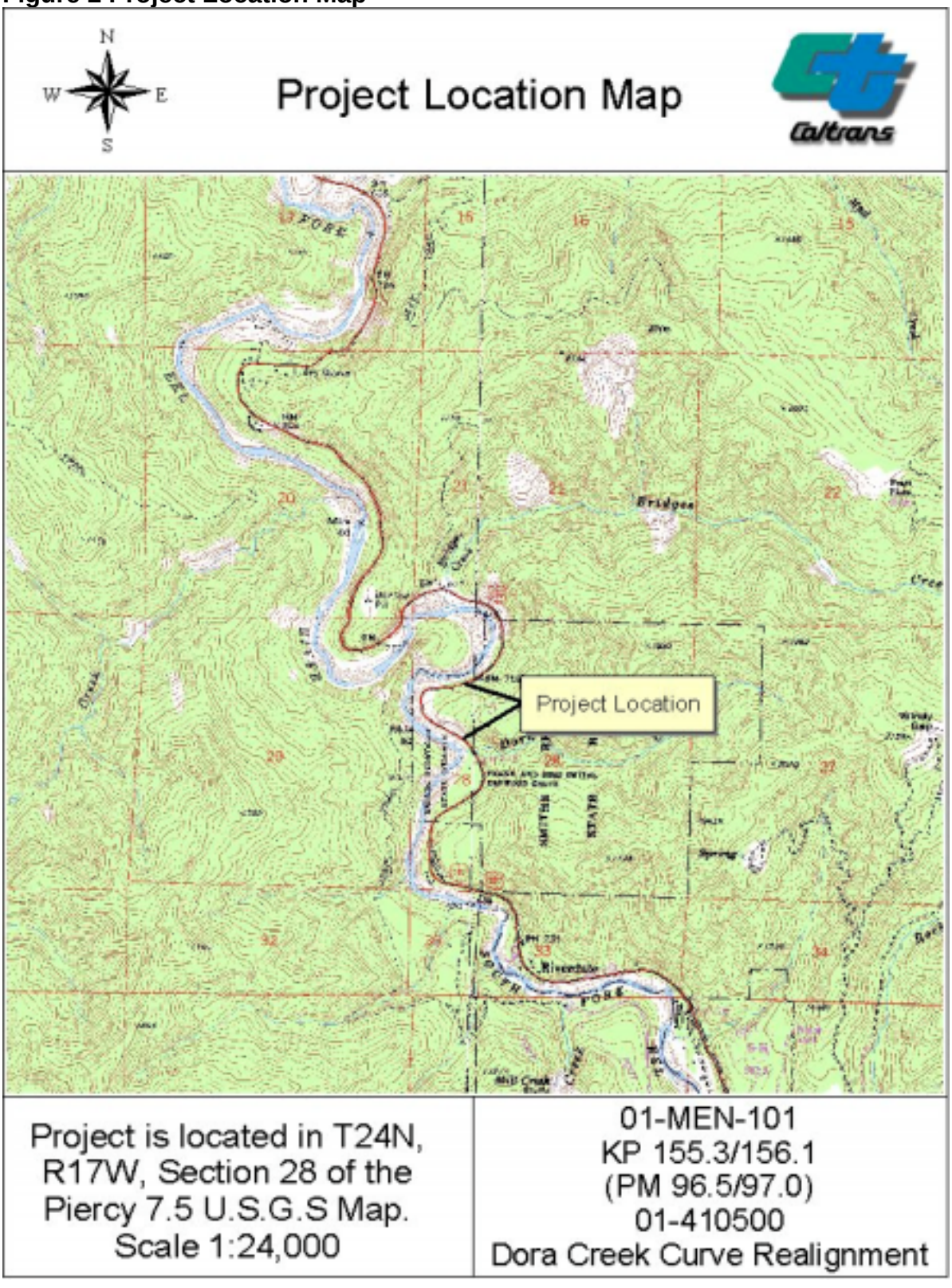
- The current warning signs will be salvaged and replaced to reflect new conditions.

- Traffic control will be required while excavating the crib wall. Two-way traffic will continue with two 3.6m lanes and 1.2m shoulders. Temporary concrete barriers known as K-rail will be used as a barrier between the southbound traffic and the excavation activities. One-way traffic control with flaggers may be implemented during work hours.

- A Temporary Construction Easement (TCE) will be required on unpaved shoulder areas within the project limits for stockpiling, staging and equipment storage. Old growth redwood trees in this area will be marked as Environmentally Sensitive Areas (ESA).

Figure 1 Project Vicinity Map

Figure 2 Project Location Map



1.2 Purpose and Need

The purpose of this project is to improve the operational efficiency of a compound curve and increase traffic safety.

The need for this project has stemmed from a history of collisions in the area of the compound curve, especially overturning vehicles. Collision data for this area suggests an ongoing problem with the compound curve. The radii of the compound curve, as well as the super-elevation rates of the curve are below Highway Design Manual (HDM) standards. A Traffic Safety Analysis completed by Caltrans on January 4, 2000 indicated that a curve re-alignment project to remove the compound curve should reduce the potential for collisions. A combination of several factors contributes to this situation. The central angle of the compound curve is 152 degrees, moving through such a lengthy curve can be disorienting to drivers and is also unexpected because of the infrequency of curves with such a large central angle.

1.3 Environmental Setting

The project area is located in the Northern Coast Range, 8.64 km northwest of Leggett and the Route 101/1 intersection. This area is rural in nature, mostly undeveloped with the exception of a few small towns and tourist facilities.

The existing alignment (Route 101), which has been identified as a principal arterial, is sited on a bluff overlooking the Eel River to the southwest. Route 101 parallels the Eel River from Leggett to Fernbridge near the mouth of the river. The project site is located near the South Fork Eel River, which is near Dora Creek. This section of the Eel River has been designated as Wild and Scenic under Federal Statute.

This section of Route 101 passes through the Smithe Redwoods State Reserve. This reserve as well as several others that are common along this route protects some of the remaining stands of old growth redwood trees in the North Coast Region. The project area is located between two old growth redwood groves on a steep road cut approximately 25 meters above the Eel River.

Between the town of Leggett and the Oregon border, Route 101 has been identified as “Eligible” for a scenic highway status on the California Scenic Highway System.

1.4 Regulatory Compliance

This project to correct a compound curve in Mendocino County has been reviewed for a number of existing laws in addition to the California Environmental Quality Act (CEQA). These laws include, but are not limited to: State and Federal Endangered Species Act, The California Fish and Game Code, Section 4(f) of the Federal Transportation Act of 1966, National Environmental Policy Act (NEPA), State and Federal Clean Air Acts, The Clean Water Act, National Historic Preservation Act, Wild and Scenic Rivers Act, as well as Executive Orders pertaining to Invasive Species, Floodplain Management and Protection of Wetlands.

A Categorical Exclusion will be prepared pursuant to the National Environmental Policy Act.

1.5 Project Alternatives / Development Process

Final selection of an alternative will not be made until after the full evaluation of environmental impacts, full consideration of public comments, and approval of the final environmental document. Selection of proposed project criteria included consideration of meeting Highway Design standards to improve safety while keeping environmental constraints in mind as well as cost.

1.5.1 Build Alternative

The build alternative consists of replacing a compound curve with a single 101m radius curve, installing additional Metal Beam Guard Rail (MBGR) and installing a concrete crib wall. This alternative was designed in coordination with California State Parks staff to develop a project alternative that minimized impacts to the Smithe Redwoods State Reserve.

1.5.2 No Build Alternative

The No Build Alternative will not address the operational deficiencies of the compound curve within the project limits. Collisions of the same type and with the same frequency could continue to occur.

1.5.3 Alternatives Considered and Withdrawn

Many alternatives for this project have been considered and withdrawn due to the fact that they either did not meet highway design standards or the environmental impacts

and costs were prohibitive and/ or the costs were not supported by the safety index. Caltrans worked closely with staff from the California Department of Parks and Recreation to develop alternatives that minimized or eliminated impacts to the Smithe Redwoods State Reserve.

- 150-meter radius curve – Under this alternative a new roadway segment would be constructed along an alignment that would meet Highway Design Manual standards. This new roadway would have required a major cut through a ridge in the State Park property. Approximately 7.1 acres of Smithe Redwoods State Reserve would be required to accommodate the new roadway alignment. Many trees in the reserve, including old growth redwoods and Douglas fir, would be removed. The estimated cost of this alternative was approximately $7.1 million. This alternative was rejected because of environmental impacts and costs.

- Minimum Project Alternative (superelevation improvements) – This alternative involved placing dense graded AC to improve the superelevation rates and transitions. This alternative was rejected because there are other buildable, fundable alternatives that would provide a superior geometric solution.

- 101m and 106m-radius curves- A number of differing variations in the curve radius were considered and rejected because they would require a cut back into the hillside of the Smithe Redwoods State Reserve and would require re-locating a PG& E access road. The hillside cut and relocation of the access road would have removed habitat for Northern Spotted Owl and Marbled Murrelet. The North Coast Redwoods State Park division due to the amount of ground disturbance and tree removal that would have been required did not support these alternatives.

1.6 Permits and Approvals Required

Based on the scope of this project as outlined in the description and the methods determined feasible for the proposed construction activities, no permits will be required from the Army Corps of Engineers, The Regional Water Quality Control Board or the California Department of Fish and Game.

Chapter 2 Affected Environment, Potential Environmental Effects, and Avoidance, Minimization and Compensation Measures

2.1 Aesthetics

To assess the impacts that this project will have on the aesthetic / visual qualities of the surrounding area, a Visual Impact Analysis Report (VIA) (11/18/02) was prepared by a Caltrans Landscape Architect. The visual analysis discusses the areas setting, its scenic qualities, potential impacts and suggested measures to minimize those impacts to aesthetic resources as a result of this project.

2.1.1 Environmental Impacts

Since this project occurs on a Route that is "Eligible" for scenic highway status on the California Scenic Highway System, care was taken to ensure that any visual impacts would not affect the scenic qualities of this area.

The project is also located along a section of the South Fork Eel River that is designated Wild and Scenic under Federal Statute.

The VIA prepared for this project concluded that this project will have a less than significant impact to the visual quality within the project area however, project features will be included to minimize visual impacts of the proposed crib wall to the visual qualities of the river area. Movement of the highway centerline 7 meters to the west and the installation of the 165-meter length of Metal Beam Guard Rail (MBGR) will be a visible change to travelers familiar with the Route 101 corridor in Northern Mendocino County. MBGR is commonly used within the state highway system therefore its presence will be acceptable. The concrete crib wall and MBGR will be visible from the Eel River. Users of the Eel River within the project area will see the new concrete crib wall and the upper section of the MBGR. Although these impacts are less than significant to visual and scenic resources, measures will be taken to retain the scenic qualities of the area.

Impacts to aesthetic or scenic resources are considered significant if a project would result in any of the following conditions (however after the impacts have been assessed, the effects may be mitigated to a level of insignificance):

- Adversely affect a scenic vista, damage scenic resources, degrade the existing visual character, or create new sources of light or glare within the view of the project area.

2.1.2 Avoidance, Minimization and Compensation Measures

Although the project has been found not to have a significant impact on visual / scenic resources, the following measures shall be implemented to carry out agreements with State Parks and to ensure that the project is consistent with the scenic and visual qualities of this area.

- Exposed elements of the concrete crib wall will have a dull finish. This will be done so that the wall will blend in better with the current surroundings.

- The slopes at the base of the proposed crib wall will be re-vegetated with native trees, shrubs and grasses. No work will be performed within the Eel River flood plain. The vegetation will help reduce the visibility of the crib wall from the Eel River.

- The abandoned section of the northbound lane shall be re-contoured with a 1:4 or flatter slope that can be re-vegetated for erosion control. Vegetation selection for the abandoned roadway should take into consideration the preservation of sight distances for northbound traffic entering the inside curve.

2.2 Air Quality

To determine potential air quality impacts, a review of the project description and design as well as review of pertinent air quality protocol information was conducted by Caltrans Environmental Staff.

2.2.1 Environmental Impacts

Air quality impacts were determined by the flowcharts in the "Transportation Project-Level Carbon Monoxide Protocol." This project is located in a federal attainment area for ozone, and particulate matter. Therefore this project is exempt from a

regional conformity analysis. A local carbon monoxide analysis was performed and using, the criteria in the "Transportation Project-Level Carbon Monoxide Protocol" (Caltrans) it was determined that this project would not result in any air quality impacts.

Construction of the project will result in the generation of suspended particulate matter. Although the amount of dust generated will result in an impact, the impacts will be temporary, local, and limited to the areas of construction.

Within the State of California, naturally occurring asbestos is known to exist in serpentine rock. Serpentine, the "state rock" of California, is a greenish, greasy-looking rock that is common in the coast ranges, Klamath Mountains, and Sierra foothills. Asbestos is a potent carcinogen, particularly when inhaled. It is therefore regulated as an airborne toxic material, and strict limits are placed on its use and handling in working environments. To ensure that asbestos is not present in the project site, a map of District 1 with known locations of serpentine rock was reviewed. Mendocino County is known to contain ultramafic rock, which is known to consist of serpentine. If asbestos is found, the Mendocino Air Quality Management District, Regulation 3, Section 6, Airborne Toxic Control Measure for Asbestos-Containing Serpentine Rock must be adhered to when handling this material. Most of the area in this county that contains this rock is located east of the project area. Therefore, construction of this project would not release any asbestos in to the air.

Impacts to Air Quality are considered significant if a project would result in any of the following impacts (however, after the impacts have been assessed, the affects may be mitigated to a level of insignificance):

- Conflict with or obstruct implementation of an air quality plan, violate any air quality standards or contribute a cumulatively considerable net increase of a criteria pollutant in a non-attainment area.

- Expose sensitive receptors to substantial pollutant concentrations.

- Create objectionable odors affecting a substantial number of people.

2.2.2 Avoidance, Minimization and Compensation Measures

Impacts will be less than significant prior to the incorporation of mitigation. The following measures will be taken to reduce the emissions of fugitive dust.

To minimize the amount of construction dust generated, and because the project is in a state PM_{10} non-attainment area, dust control practices must be incorporated into the project to mitigate this potential impact. The dust control practices must comply with the current Caltrans' Standard Specifications and Mendocino County Air Quality Management District Rule 430 – Fugitive Dust Emissions:

A. The handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne, shall not be permitted.

B. Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to, the following provisions:

    1. Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.

    2. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Containment methods can be employed during sandblasting and other similar operations.

    3. Conduct agricultural practices in such a manner as to minimize the creation of airborne dust.

    4. The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.

    5. The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.

    6. The paving of roadways and their maintenance in a clean condition.

    7. The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

2.3 Biological Resources

In order to determine the potential biological impacts as a result of this project, a Caltrans biologist conducted a review of the project design and its effects on the natural environment. Methods to research and observe the biological resources present within the project limits included:

- Searches of the California Department of Fish and Game's Natural Diversity Data Base (Rarefind, 1997: 7.5-minute USGS quads) and the California Native Plant Society database.

- Correspondence and coordination with the California Department of Fish and Game, National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS).

- Field reviews of the project site on the following dates: October 20, 1999, June 21, 2000, March 7, 2001, and July 11, 2001.

A Natural Environmental Study Report was completed that concluded that the project will not result in any substantial adverse / significant environmental impacts to biological resources.

A literature search conducted for the project area identified that there is limited habitat for listed species. However, adjacent to the project area there is suitable habitat for Northern Spotted Owl, Marbled Murrelet and Bald Eagle (all three species have Federal Threatened Status). Field surveys in combination with literature data and contact with the resource agencies concludes that it is unlikely that Bald Eagles are nesting within one mile of the project area and foraging occurrences may be incidental and not affected by the construction.

Consultation with the regulatory agencies concentrated on the potential effects to Marbled Murrelet and Northern Spotted Owl. Consultation was also sought from the National Marine Fisheries Service (NMFS) for potential impacts to Federally listed fish species or to Coho designated critical habitat.

There are no special status plants within the project area.

2.3.1.1 Environmental Impacts

The most significant direct impact a project could have on the two listed species analyzed in this report would be removal of habitat. This project does not involve removal of habitat typically used by Northern Spotted Owl and Marbled Murrelet.

Direct effects may also occur from additional noise in the project area, which is limited to use of equipment that is not expected to be considerably greater than the noise from existing traffic. Construction activities are not expected to be a disturbance exceeding the existing human activity and ambient traffic noise; however, the activity as proposed, will occur during the breeding season of both species. Should the species be nesting in habitat adjacent to the proposed project, they may be affected by the additional noise and activity. It is expected that throughout the working hours, the existing traffic noise will mask most of the noise from construction.

Caltrans has received a letter of concurrence for a "May affect not likely to adversely affect Northern Spotted Owl and Marbled Murrelet" from USFWS (April 3, 2003). This letter is located in Appendix F.

Caltrans also received a letter of concurrence of a "no effect" to federally listed fish species and Coho designated critical habitat determination from NMFS (February 20, 2003).

2.3.2 Vegetation / Habitat

Construction of this project will occur adjacent to the two-lane highway. This is a highly disturbed area on which there is little vegetation along the shoulder other than ruderal grasses. The slope east of the project is part of the Smithe Redwoods State Reserve. The vegetation is dense Douglas fir, Madrone and Tan oak with some manzanita bushes mixed in. There are a few scattered redwoods throughout this section of the reserve.

2.3.2.1 Environmental Impact

Vegetation removal will be limited to what is absolutely necessary to construct the project. Two trees will be removed to construct the crib wall.

2.3.3 Wetlands and Other Waters of the United States

There are no wetlands or Jurisdictional Waters of the US present within the project area. The Eel River is adjacent to the proposed construction area. Work will occur

outside of the highest flood levels ever recorded in the area. Work will occur in upland habitat, outside of the riparian vegetation zone.

2.3.3.1 Environmental Impacts

There will be no impacts to wetlands or waters of the US.

2.3.4 Wildlife

The area adjacent to the project area includes habitat suitable for non-listed species, including, but not limited to mule deer, raccoons, bobcats, and crows. These species have either been seen or evidence of their presence was found during field surveys. Other species common to this redwood, douglas fir habitat are likely to occur, although these species too are limited by the high level of disturbance from the existing highway, and habitat alteration.

2.3.4.1 Environmental Impacts

No direct effects to non-listed species are expected to occur as a result of this project. The construction impacts will be short in duration and it is expected that these species will move to other parts of the Redwood Reserve.

Two trees will be removed to construct the crib wall on the west side of the project area. In order to comply with the Migratory Bird Treaty Act, the trees will be surveyed prior to construction for nest activity prior to removal.

Impacts to biological resources are considered significant if a project would result in any of the following impacts (however, after the impacts have been assessed, the effects may be mitigated to a level of less than significant)

- Any impact to an individual species, or any loss of critical habitat for those species, listed as endangered or threatened by either the USFWS, or California Department of Fish and Game (CDFG).
- A reduction in the viability of a declining or vulnerable species population.
- Impacts likely to result in a decline in population of species identified by the State of California as a species of special concern or identified as sensitive by the USFS.

- Loss of a nest, nest stand if stand characteristics (e.g., canopy closure, tree diameter) are essential for nesting use, or other loss of nesting opportunity for any special status bird species.

- Interfere with movement of native resident or migratory species.

- Adversely affect wetlands under jurisdiction of Section 404 of the Clean Water Act.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional or state habitat conservation plans.

2.3.5 Avoidance, Minimization and Compensation Measures

Although no significant impacts are expected to occur to biological resources as a result of this project, measures will be taken to prevent and or minimize impacts to said resources.

- Construction will be limited to a period between June 1 and October 15.

- Removal of vegetation will be limited to the minimum amount necessary to obtain access and construct project features.

- Pre-Construction surveys for nesting birds will be required prior to removal of two trees in the area planned for crib wall construction. A Caltrans biologist shall be contacted to conduct these surveys.

- This document covers removal of slope material through the use of standard excavation equipment. Should additional measures be required (i.e. blasting) the Caltrans biologist shall be notified prior to the activity so that proper clearance can be obtained.

2.4 Cultural Resources

In order to determine the impacts to cultural resources as a result of this project, a Caltrans Archaeologist conducted record searches, field review of the Area of

Potential Effects (APE) as well as contacts made to the local Native American representatives and Historical Societies in the project area.

2.4.1 Affected Environment / Impacts

Caltrans prepared a Historic Property Survey Report (August 2000) to comply with the requirements of Section 106 of the National Historic Preservation Act as well as CEQA and the Public Resources Code § 5024. A historic site was identified within the APE of the project, however this site was found not to be eligible for the National Register of Historic Places (NRHP) nor the California Register of Historical Resources. It was determined that the project will not result in a substantial adverse change or have a significant impact on Cultural Resources. The Federal Highway Administration as well as the State Historic Preservation Officer concurred with Caltrans findings (concurrence letter found in Appendix G)

Impacts to cultural, paleontological, or geologic resources are considered significant if a project would result in any of the following impacts (however after the impacts have been assessed, the effects may be mitigated to a level of insignificance):

- A cultural resource is significant if it is listed on or is found eligible for the California Register of Historic Places. When a resource is found to be eligible for the California Register, a determination must be made about any potential changes to the significance of the historical resource as result of the proposed action. The adverse changes may include those listed in Section 15064.5(b)(1-2) of the CEQA guidelines.

- The disruption of any human remains interred inside or out of formal cemeteries.

- Destroy unique paleontological resource, site, or a unique geologic feature.

2.4.2 Avoidance, Minimization and Compensation Measures

Although this project will not have a significant impact to cultural resources, the following measures shall be implemented to minimize impacts to unexpected resources during construction activities:

- If buried, or otherwise unknown cultural material, such as bones, arrowheads, bottles, foundations or other historic or prehistoric remains are discovered during work associated with this project, it is Caltrans policy and California

State Law that work temporarily cease in the area of the find and the environmental branch contacted immediately. A qualified archaeologist will evaluate the nature and significance of the find and coordinate the situation with the SHPO (Environmental Handbook Vol.2, Chapter 1)

- If during any subsurface disturbance or pavement removal, human skeletal remains are encountered, the Contractor's construction activities, within 10 meters shall be halted immediately and the County Coroner shall be notified. Construction activities shall not be resumed until permitted in writing by the Engineer. All provisions of the Health and Safety Code §7054 and 7050.5 and the Public Resources Code (PRC) § 5097.98 and 5097.99 shall be followed. The California Public Resources Code § 5097.98 and 5097.99 require protection of Native American remains, which may be found, and outline procedures that must be followed for handling any burials found.

2.5 Hazards and Hazardous Materials

To determine the potential risks associated with hazardous waste, Caltrans North Region Hazardous Waste Office prepared an Initial Site Assessment (7/10/00) and determined this area to be free of the potential for hazardous waste issues.

2.6 Hydrology and Water Quality

A water quality review was conducted utilizing project mapping, The Caltrans Stormwater Quality Handbook (2002) and the State Water Resources Control Board website. Caltrans Hydrology unit prepared a floodplain analysis using the Federal Emergency Management Agency (FEMA) mapping.

2.6.1 Environmental Impacts related to Water Quality

Federal water quality objectives are dictated by section 303(d) of the Clean Water Act and EPA water quality planning and management regulations, which require states to identify waters that do not meet or are not expected to meet water quality standards even after technology- based or other controls are in place. These water bodies are considered water quality limited and are reported by states in their section 303(d). The South Fork Eel River is a section 303(d) water body and the pollutant of concern is sedimentation / siltation. Some of the sources of the sedimentation / siltation

include: range grazing, silviculture, logging road construction, resource extraction, erosion and removal of riparian vegetation.

Areas in which construction of the wall and shoulder widening will occur will be cleared of vegetation. Erosion and sedimentation may occur during and immediately following the construction phase of the project. However these effects can be minimized through the implementation of appropriate Best Management Practices (BMP) discussed further in the Avoidance, Minimization and Compensation Measures section 2.6.2 of this document.

2.6.2 Environmental Impacts related to Hydrology.

A floodplain analysis, completed August 22, 2000, states that the toe of the crib wall will be approximately 7meters above the High Water Mark. Since the project is above the 100-year floodplain, there is no additional risk associated with flooding as a result of construction of a crib wall as planned.

Impacts to existing Hydrology or Water Quality will be considered significant if the proposed project would result in any of the following impacts (however, after the impacts have been assessed, the affects may be mitigated to a level of insignificance)

- ∉ Violate water quality standards or waste discharge requirements.
- ∉ Substantially deplete groundwater supplies or interfere with groundwater recharge.
- ∉ Substantially alter existing drainage patterns, resulting in substantial increase in erosion or surface runoff and causing floods.
- ∉ Create or contribute to runoff that exceeds drainage system capacity.
- ∉ Place housing within a 100-year flood hazard area, or impede or redirect flows within a 100- year flood hazard area.
- ∉ Expose people or structures to significant risk, loss, injury or death from flooding; or contribute to an inundation by seiche, tsunami or mudflow.

2.6.3 Avoidance, Minimization and Compensation Measures

Impacts to water quality will be less than significant prior to the incorporation of mitigation; however, the potential for increased erosion and sedimentation exists

during the construction phase of this project. Erosion impacts can be lessened through appropriate construction management practices, including the following:

- The contractor shall implement storm water controls as specified in Section 7-1.01 G of the Caltrans Standard Specifications Handbook. Furthermore, the contractor must prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the guidelines in the Caltrans Storm Water Pollution Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual (Nov, 2000). The SWPPP must identify BMP's that shall be implemented during construction to minimize or reduce the potential for pollutant storm-water and non-storm water discharges. At a minimum, the following BMP's shall be addressed in the SWPPP: temporary soil stabilization; temporary sediment control; wind erosion control; non- storm water management; waste management and materials pollution control. The BMPs identified and subsequently implemented shall comply with the requirements in the Caltrans Construction Site Best Management Practices manual.

2.7 Land Use and Planning

No impacts to current land use patterns are expected as a result of project implementation. The project will only require a small amount of Right of Way on which Caltrans has historically had prescriptive rights. There will be no direct land use change as a result.

2.7.1 Current Land Use

The project area lies within land owned and managed by the State Park system. This area has been further designated in the California Public Resources Code (PRC) as a Redwood Reserve. Section 5019.5 of the PRC defines a reserve as:

> *…areas embracing outstanding natural or scenic characteristics of statewide significance. The purpose of a state reserve is to preserve its native ecological associations, unique fauna or floral characteristics, geological features, and scenic qualities in a condition of undisturbed integrity. Resource manipulation shall be restricted to the minimum required to negate the deleterious influence of man…*

In working with State Parks to develop this project, Caltrans has developed a plan that will have minimal effect to this designated reserve.

2.7.2 Consistency With State, Regional and Local Plans

In order to determine the potential impacts to current land use, Caltrans Environmental Staff conducted a review of the Mendocino County General Plan and the 2001 Mendocino County Regional Transportation Plan (RTP). This project is included in the RTP and the land use impacts previously studied in the Draft Program Environmental Impact Report (Leonard Charles and Assoc., Dec 2002).

2.7.2.1 Wild And Scenic Rivers

The proposed project is located in the Smithe Redwoods State Reserve along the South Fork Eel River near Dora Creek. The South Fork Eel River in this area is designated as a Wild and Scenic River. Pursuant to Section 7 of the Wild and Scenic Rivers act, Caltrans has coordinated with the National Park Service with regards to this project and its proximity to the South Fork Eel River.

Caltrans received a concurrence letter on April 3, 2003 from the National Park Service that this project is will not have an adverse impact on the South Fork Eel River. This letter is included in this document as Appendix D.

2.7.2.2 Parks and Recreation

Coordination pursuant to Section 4(f) of the Department of Transportation Act has occurred between Caltrans and the North Coast Redwoods District of the California State Parks regarding the Smithe Redwoods State Reserve. Results of this coordination in the form of a concurrence letter are included in Appendix C. The project area lies within a designated redwood reserve. Currently, there is no formal management plan established by the State Parks and Recreation department for this area. No impacts to the current uses of this area are expected to occur as a result of this project.

2.7.3 Land Use Impacts

Impacts due to Land Use and Planning will be considered significant if the proposed project would result in any of the following impacts (however, after the impacts have been assessed, the effects may be mitigated to a level of insignificance):

- ∉ Physically divide an established community.

- Conflict with land use plans, policies, or regulations. In addition, conflict with any Habitat Conservation Plans or other type of approved biological habitat management plan.

2.7.4 Avoidance, Minimization and Compensation Measures

The project plans are consistent with the local land use plans, policies and regulations of Mendocino County and the immediate project vicinity. Impacts to the existing land use are less than significant and no mitigation measures will be required.

2.8 Noise

This project is not a Type I project as defined by the *Caltrans Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects (October 1998,* therefore no further analysis is required.

A Type I project is defined in 23 CFR 772 as follows:

> *A proposed Federal or Federal –aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increases the number of through traffic lanes.*

2.8.1 Affected Environment /Impacts

The current project will not significantly impact any sensitive noise receptors or result in any of the conditions listed below in the TOS.

Construction noise from the contractor equipment is unavoidable. However, this is a temporary noise source regulated by Caltrans' Standard Specifications Section 7-1.01I, which is included as part of the contract. The contractor is required to comply with all local sound control and noise level rules, regulations and ordinances.

2.8.1.1 Thresholds of Significance

Impacts to the ambient noise levels will be considered significant if the proposed project would result in any of the following impacts (however after the impacts have been assessed, the effects may be mitigated to a level of insignificance):

- Expose persons to noise levels exceeding established standards.

- ∉ Expose persons to excessive ground-borne vibration.
- ∉ Substantially increase ambient noise temporarily, periodically, or permanently.
- ∉ Expose people to excessive noise near a public use or private airstrip.

2.8.2 Avoidance, Minimization and Compensation Measures

There are no potentially significant impacts to sensitive noise receptors: therefore, no Avoidance, Minimization and Compensation Measures are necessary.

2.9 Cumulative Impacts

Cumulative impacts are those that are produced by the aggregation of individual environmental impacts resulting from a single project or from two or more projects in conjunction. Analysis of cumulative impacts is required pursuant to the State CEQA Guidelines, Title 14, Sections (§) 15130 and 15355. The following is an excerpt from §15355 that explains cumulative impacts:

> *Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The Cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

The current project is being constructed to improve the safety of a compound curve, which does not incorporate features that will increase the level of service or operating speed of the facility.

This section of Route 101 in Mendocino County frequently experiences damage from storms. Projects in this area are typically urgent in nature and may require vegetation removal similar to the Dora Creek Curve Realignment project, in order to restore the operational capability of the facility or insure the public's health and safety. Additionally, because of the scenic nature of this area, aesthetic impacts may occur. In taking into consideration recent storm damage projects and maintenance activities

with close proximity to this project, cumulative impacts on vegetation removal and aesthetics are not expected to be significant.

Chapter 3 Comments and Response to Comments

When the 30-day public review period for this document has ended, this section will contain any comments received and the response to those comments

Chapter 4 List of Preparers

The Caltrans North Region Office of Environmental Management prepared this Negative Declaration / Initial Study (ND/IS). The following Caltrans staff members assisted in the preparation of this ND/IS:

Noble, Daryl, Associate Environmental Planner - Archaeology

Contribution: Historic Property Survey Report*, Native American Consultation, State Historic Preservation Office coordination.

Melim, Suzanne, Associate Environmental Planner – Natural Sciences

Contribution: Natural Environmental Study Report*, Biological Assessment* and Section 7 consultation.

Hibbert, Jim, Landscape Associate

Contribution: Visual Impact Analysis Report*, Consultation with State Parks for re-vegetation plans.

Vina, Michael, Hydraulics Engineer

Contribution: Floodplain Analysis*

Grandy, Dwayne, Transportation Engineer - Civil

Contribution: Initial Site Assessment*, Hazardous Waste Studies

Speckert, Lynn A, Associate Environmental Planner

Contribution: Air Quality and Noise Analysis*

Timmons, Kelly, North Region Design Project Engineer

Powell-Jones, Brenda, Environmental Planner

Contribution: Project Coordinator, Water Quality Analysis, Wild and Scenic River Coordination

Bartlett, Mike, Senior Environmental Planner

1 *denotes reports that are bound separately and available by written request to Mike Bartlett , Office of Environmental Management, 2389 Gateway Oaks Dr. Suite 100, Sacramento CA 95833.*

Chapter 5 Distribution List

Resources Agency
1020 Ninth Street, Third Floor
Sacramento, CA 95814

Office of Historic Preservation
PO Box 942896
Sacramento, CA 94296-0001

Dept of Parks and Recreation
Resource Management Division
PO Box 942896
Sacramento CA 94296-0001

Department of Parks and Recreation
North Coast Redwoods District
PO Box 2006
Eureka CA 95502

Department of Water Resources
1020 Ninth Street, Third Floor
Sacramento CA 95814

Department of Fish and Game
Environmental Services Division
1416 Ninth Street, 13th Floor
Sacramento CA 95814

Air Resources Board
PO Box 2815
2020 L Street
Sacramento CA 95814-2815

State Water Resources Control Board
Division of Water Quality
PO Box 944213
Sacramento CA 94244-2130

Regional Water Quality Control Board
North Coast Region
5550 Skylane Blvd., Suite A
Santa Rosa CA 95403

Ukiah Library
105 N Main Street
Ukiah CA 95482

Appendix A CEQA Checklist

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The CEQA impact levels include potentially significant impact, less than significant impact with mitigation, less than significant impact, and no impact. Please refer to the following for detailed discussions regarding impacts:

CEQA:

- Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq. (http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/)
- Statutes: Division 13, California Public Resource Code, Sections 21000-21178.1 (http://www.ceres.ca.gov/topic/env_law/ceqa/stat/)

CEQA requires that environmental documents determine significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. A “no impact” reflects this determination. Any needed discussion is included in the section following the checklist.

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	X	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	X	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	X
AGRICULTURE RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	X
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	X
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	X
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	X
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	X	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	X	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	X	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	X

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
COMMUNITY RESOURCES - Would the project:				
a) Cause disruption of orderly planned development?				X
b) Be inconsistent with a Coastal Zone Management Plan?				X
c) Affect life-styles, or neighborhood character or stability?				X
d) Physically divide an established community?				X
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?				
f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?				X
g) Affect property values or the local tax base?				X
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines?				X
i) Result in alterations to waterborne, rail, or air traffic?				X
j) Support large commercial or residential development?				X
k) Affect wild or scenic rivers or natural landmarks?			X	
l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)?			X	
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X
GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial				X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	X
ii) Strong seismic ground shaking?	☐	☐	☐	X
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	X
iv) Landslides?	☐	☐	☐	X
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	X
HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	X

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	X
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	X
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	X
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	X
f) Otherwise substantially degrade water quality?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	X
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	X
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	X
LAND USE AND PLANNING - Would the project:				
a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	X
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	X
MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	X
NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	X

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	X	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X
POPULATION AND HOUSING - Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X
PUBLIC SERVICES -				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	X
Police protection?	☐	☐	☐	X
Schools?	☐	☐	☐	X
Parks?	☐	☐	☐	X
Other public facilities?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
RECREATION -				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	X
TRANSPORTATION/TRAFFIC - Would the project:				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	X
e) Result in inadequate emergency access?	☐	☐	☐	X
f) Result in inadequate parking capacity?	☐	☐	☐	X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	X
UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	X

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	X

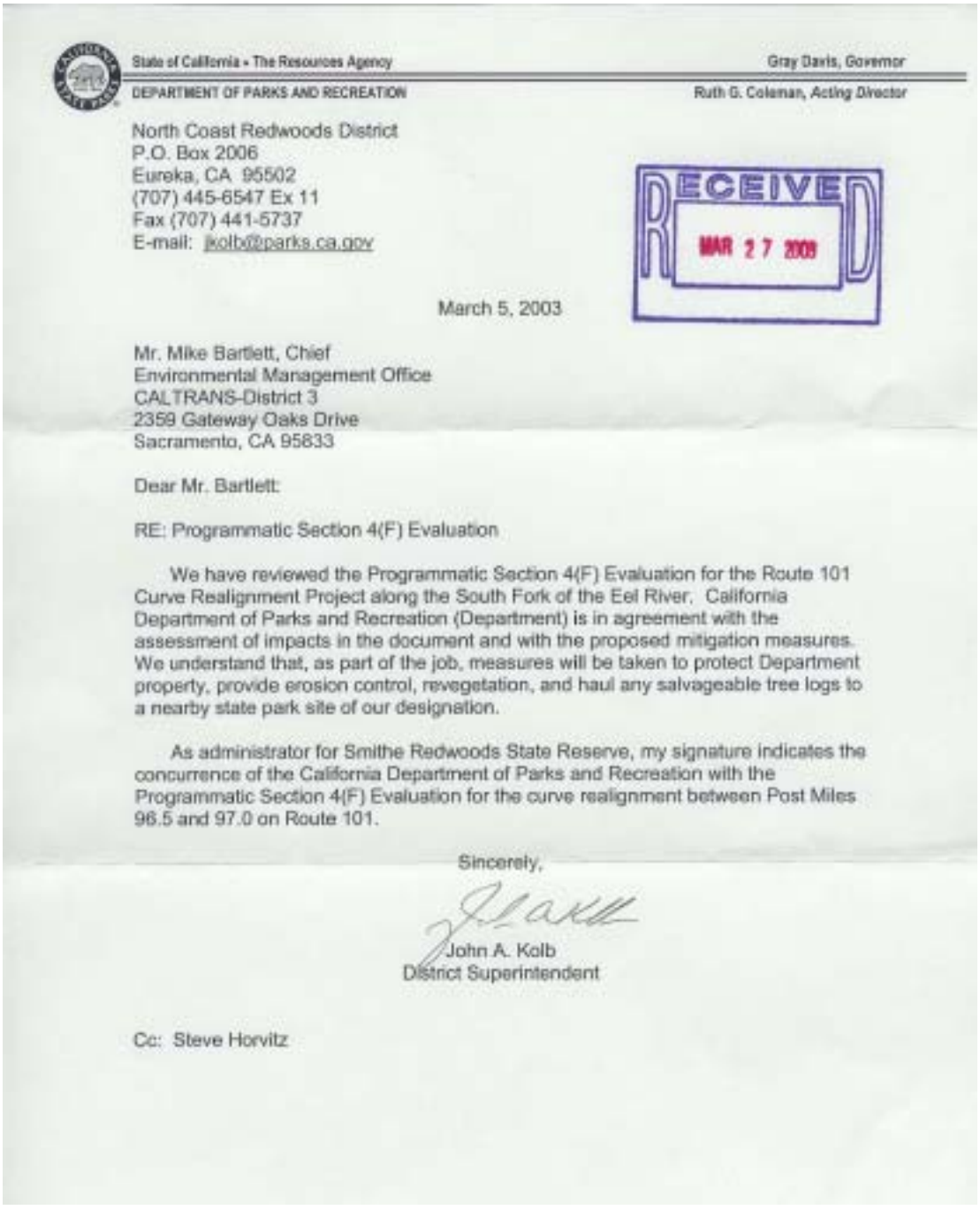
MANDATORY FINDINGS OF SIGNIFICANCE -

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	X
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	X

Appendix B Project Detail Map

Appendix C State Park Concurrence Letter

.



State of California • The Resources Agency — Gray Davis, Governor
DEPARTMENT OF PARKS AND RECREATION — Ruth G. Coleman, *Acting Director*

North Coast Redwoods District
P.O. Box 2006
Eureka, CA 95502
(707) 445-6547 Ex 11
Fax (707) 441-5737
E-mail: jkolb@parks.ca.gov

RECEIVED
MAR 27 2003

March 5, 2003

Mr. Mike Bartlett, Chief
Environmental Management Office
CALTRANS-District 3
2359 Gateway Oaks Drive
Sacramento, CA 95833

Dear Mr. Bartlett:

RE: Programmatic Section 4(F) Evaluation

We have reviewed the Programmatic Section 4(F) Evaluation for the Route 101 Curve Realignment Project along the South Fork of the Eel River. California Department of Parks and Recreation (Department) is in agreement with the assessment of impacts in the document and with the proposed mitigation measures. We understand that, as part of the job, measures will be taken to protect Department property, provide erosion control, revegetation, and haul any salvageable tree logs to a nearby state park site of our designation.

As administrator for Smithe Redwoods State Reserve, my signature indicates the concurrence of the California Department of Parks and Recreation with the Programmatic Section 4(F) Evaluation for the curve realignment between Post Miles 96.5 and 97.0 on Route 101.

Sincerely,

John A. Kolb
District Superintendent

Cc: Steve Horvitz

Appendix D Wild and Scenic River Concurrence

United States Department of the Interior
NATIONAL PARK SERVICE
California Hydro Program
c/o Bureau of Land Management, Ca. State Office
2800 Cottage Way, Suite W-1834, CA 942
Sacramento, California 9

IN REPLY REFER TO:

RECEIVED
APR 3 2003

March 28, 2003

Mr. Mike Barlett
Caltrans
2389 Gateway Oaks Dr., Ste 100
Sacramento, CA 95833

Subject: National Wild and Scenic River Act Consistency, EA 01-410500

Dear Mr. Barlett:

This is response to your letter of March 14, 2003 requesting our coordination for the highway realignment on Route 101 in Mendocino County. This project is adjacent to the South Fork Eel River, a designated national wild and scenic river.

Section 7 of the Wild and Scenic Rivers Act prohibits federal agencies from "assist[ing] by loan grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established."

The National Park Service considers water resources projects to include projects involving construction in the bed or on the banks of the river. The proposed reconstruction does not involve construction in the bed or on the banks (below the ordinary high water line) of the river and is therefore not considered to be a water resources project, and is not subject to review under Section 7 of the Wild and Scenic Rivers Act.

We note National Marine Fisheries Service's letter of February 20, 2003 stating that they agree with Caltrans' assessment that "there will be no impacts to Federally listed species, or to coho designated critical habitat as a result of this project". Based on the information provided, we have determined that the proposed project will not have a direct and adverse effect on the values for which the river was designated.

If you have any further questions, please contact me at (916) 978-4316.

Sincerely,

Harry Williamson
CA Wild and Scenic Rivers Coordinator

Cc: Jen Carville, CA Resources Agency (email

Appendix E National Marine Fisheries Concurrence Letter

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404

In response reply to:
February 20, 2003 151422SWR02SR8544:PJ

Jeffrey M. Loudon, Chief
Environmental Management, M-1 Branch
Department of Transportation
District 3
P.O. Box 911
Marysville, California 95901

Dear Mr. Loudon:

Thank you for your letter regarding the proposed curve realignment and concrete crib wall construction on State Route 101 in Mendocino County. The proposed project is located in the Smith Redwood State Reserve east of the South Fork Eel River. Federally listed Northern California steelhead, Southern Oregon/Northern California Coast coho, and California Coastal Chinook Evolutionarily Significant Units utilize the South Fork Eel watershed.

The California Department of Transportation (Caltrans) proposes a 101-meter radius curve realignment with reconstruction of 300-meters of roadway. Reconstruction includes removing the existing road surface and paving with dense graded asphalt. In addition, Caltrans proposes to install a 65-meter long and 7-meter high crib wall. No excavation will be conducted below the 1964 flood mark. There will be no extensive areas of exposed soil and Best Management Practices will be implemented where necessary to avoid erosion and transport of fines to the river. Vegetation removal will be limited and work will be conducted between June 1 and October 15. Caltrans anticipates that the project will be started and completed during the 2004 season.

Based on the project description and on information provided by Suzanne Melim, Caltrans, NOAA Fisheries agrees with your assessment that there will be no impacts to Federally listed species, or to coho designated critical habitat, as a result of this project. However, if new information becomes available indicating that species may be adversely affected by the project, or if project plans change, a consultation in accordance with section 7 of the Endangered Species Act may be necessary.

If you have any questions about this letter, contact Mr. Peter Johnsen at (707) 468-4063.

Sincerely,

Patrick J. Rutten
Northern California Supervisor
Protected Resources Division

cc: Suzanne Melim, Caltrans

Appendix F USFWS Concurrence Letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1655 Heindon Road
Arcata, CA 95521
Phone (707) 822-7201 FAX (707) 822-8411

In Reply Refer To:
AFWO

April 3, 2003

Jeffrey M. Loudon, Chief
Office of Environmental Management, M-1
California Department of Transportation
District 3, Sacramento Area Office, MS 41
P.O. Box 942874
Sacramento, CA 9474-0001

Subject: Informal Section 7 Consultation for Curve Realignment Project on State Route 101 in Mendocino County (file number 1-14-2002-1245.2)

Dear Mr. Loudon:

This letter responds to your January 23, 2003, correspondence (received January 30, 2003) requesting the U.S. Fish and Wildlife Service's (Service) concurrence with your determination that the proposed Curve Realignment on State Route 101, PM 96.5/97.0, Mendocino County, California may affect, but is not likely to adversely affect the threatened northern spotted owl (owl) (*Strix occidentalis caurina*) and marbled murrelet (murrelet) (*Brachyramphus marmoratus*), in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act). The California Department of Transportation (Caltrans) request was submitted on behalf of the Federal Highway Administration (FHWA). This letter transmits our concurrence with your determination of effects.

Your letter did not request consultation on any other listed species under the Service's jurisdiction. Therefore, this letter of concurrence will address only the owl and murrelet. Further, your letter indicates that no designated critical habitat for the owl or murrelet will be destroyed or modified by the project. Critical habitat for the owl and murrelet will not be discussed further in this consultation.

This consultation is based on information provided in your January 21, 2003, biological assessment that contains a complete description of the proposed action and its effects on the above species. A complete administrative record for this consultation is on file in this office. The proposed action occurs within the California Coast Range Physiographic Province and the Coast 3 Ecological Zone.

The project will not affect suitable nesting/roosting/foraging habitat for the northern spotted owl or suitable nesting habitat for the marbled murrelet, since no vegetation other than roadside brush will be removed during the proposed construction. Although the land to the west of the

proposed project site is part of the Smithe Redwoods Reserve, the biological assessment indicates this habitat is marginal breeding habitat for the owl and murrelet, due to prior habitat modification and the existence of a Pacific Gas and Electric Company access road through the stand. The proposed project would not alter this habitat.

Equipment used on this project is likely to produce sound levels that approximates those currently occurring on this portion of Highway 101. This highway, the most heavily used corridor connecting Mendocino County with points to the north in Humboldt County and points to the south in Sonoma County, currently receives substantial heavy diesel truck traffic, as well as passenger cars and other vehicles. Further, the construction area is a zone of truck deceleration and frequent "jake braking", resulting in elevated noise levels from normal traffic flow. Diesel and gasoline powered equipment would be used on the proposed construction project, resulting in a similar acoustic impact as the current traffic load. This, combined with the use of equipment along the existing roadway and adjacent road shoulder, supports a conclusion that the effects of project-related noise to any owls or murrelets in nearby suitable habitat are insignificant.

We concur with your determination that the proposed project may affect but is not likely to adversely affect the northern spotted owl and marbled murrelet. Our concurrence is based on the following factors:

1. The proposed project will not remove any northern spotted owl nesting, roosting or foraging habitat or murrelet nesting habitat.

2. Noise levels generated by the project are not expected to be significantly higher than existing noise levels at the site, due to existing traffic on the highway and existing roads within nearby marginal owl and murrelet suitable habitats, and the already high use of existing pulloffs and parking areas by motorized vehicles.

3. Disturbance of owls or murrelets due to human use of the site during construction is not expected to be significantly above existing conditions, since this area is already subject to substantial recreational access to the Eel River during the summer period.

No incidental take was requested for the proposed construction project, and none is authorized with this consultation. This concludes the informal consultation process. No further action pursuant to the Act is necessary unless new information reveals that the proposed action may affect listed species or critical habitat in a manner or to an extent not considered in your correspondence, the action is modified in a manner that causes an effect to the listed species or critical habitat not considered in your correspondence, or a new species or critical habitat is

designated that may be affected by the proposed activity. If you have further questions regarding this response, please contact Ray Bosch of our staff at (707) 822-7201.

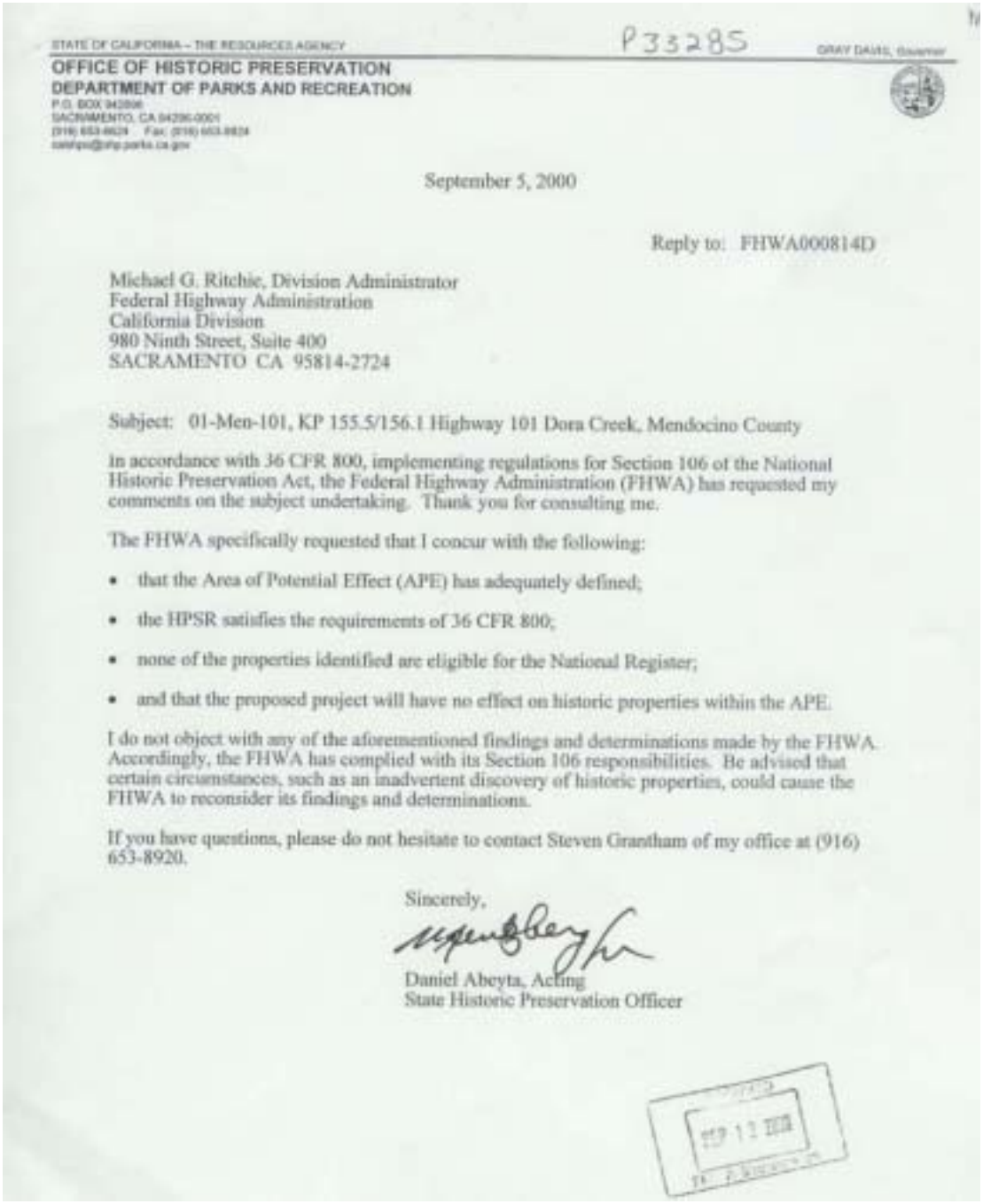
Sincerely

for

Mike M. Long
Field Supervisor

cc:
FHWA, Sacramento, CA (Attn: Harry Khani)
Caltrans, Sacramento (Attn: Brenda Powell-Jones)
Caltrans, Sacramento (Attn: Suzanne Melim)

Appendix G Section 106 Concurrence



STATE OF CALIFORNIA – THE RESOURCES AGENCY P33285 GRAY DAVIS, Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-8624
calshpo@ohp.parks.ca.gov

September 5, 2000

Reply to: FHWA000814D

Michael G. Ritchie, Division Administrator
Federal Highway Administration
California Division
980 Ninth Street, Suite 400
SACRAMENTO CA 95814-2724

Subject: 01-Men-101, KP 155.5/156.1 Highway 101 Dora Creek, Mendocino County

In accordance with 36 CFR 800, implementing regulations for Section 106 of the National Historic Preservation Act, the Federal Highway Administration (FHWA) has requested my comments on the subject undertaking. Thank you for consulting me.

The FHWA specifically requested that I concur with the following:

- that the Area of Potential Effect (APE) has adequately defined;
- the HPSR satisfies the requirements of 36 CFR 800;
- none of the properties identified are eligible for the Natioeal Register;
- and that the proposed project will have no effect on historic properties within the APE.

I do not object with any of the aforementioned findings and determinations made by the FHWA. Accordingly, the FHWA has complied with its Section 106 responsibilities. Be advised that certain circumstances, such as an inadvertent discovery of historic properties, could cause the FHWA to reconsider its findings and determinations.

If you have questions, please do not hesitate to contact Steven Grantham of my office at (916) 653-8920.

Sincerely,

Daniel Abeyta, Acting
State Historic Preservation Officer